

## UPDATE ON THE BIRDS OF ISLA GUADALUPE, BAJA CALIFORNIA

LORENZO QUINTANA-BARRIOS and GORGONIO RUIZ-CAMPOS, Facultad de Ciencias, Universidad Autónoma de Baja California, Apartado Postal 1653, Ensenada, Baja California, 22800, México (U. S. mailing address: PMB 064, P. O. Box 189003, Coronado, California 92178-9003; [gruiz@uabc.mx](mailto:gruiz@uabc.mx))

PHILIP UNITT, San Diego Natural History Museum, P. O. Box 121390, San Diego, California 92112-1390; [birds@sdnhm.org](mailto:birds@sdnhm.org)

RICHARD A. ERICKSON, LSA Associates, 20 Executive Park, Suite 200, Irvine, California 92614; [Richard.Erickson@lsa-assoc.com](mailto:Richard.Erickson@lsa-assoc.com)

**ABSTRACT:** We report 56 bird specimens of 31 species taken on Isla Guadalupe, Baja California, between 1986 and 2004 and housed at the Colección Ornitológica del Laboratorio de Vertebrados de la Facultad de Ciencias, Universidad Autónoma de Baja California, Ensenada, along with other sight and specimen records. The specimens include the first published Guadalupe records for 10 species: the Ring-necked Duck (*Aythya collaris*), Long-billed Curlew (*Numenius americanus*), Bonaparte's Gull (*Larus philadelphia*), Ash-throated Flycatcher (*Myiarchus cinerascens*), Warbling Vireo (*Vireo gilvus*), Tree Swallow (*Tachycineta bicolor*), Yellow Warbler (*Dendroica petechia*), Magnolia Warbler (*Dendroica magnolia*), Yellow-headed Blackbird (*Xanthocephalus xanthocephalus*), and Orchard Oriole (*Icterus spurius*). A specimen of the eastern subspecies of Brown-headed Cowbird (*Molothrus ater ater*) and a sight record of the Gray-cheeked Thrush (*Catharus minimus*) are the first reported from the Baja California Peninsula (and islands). A photographed Franklin's Gull (*Larus pipixcan*) is also an island first. Currently 136 native species and three species introduced in North America have been recorded from the island and nearby waters.

Isla Guadalupe, 260 km west of the coast of Baja California, is the most isolated of the islands off Alta and Baja California and, prior to extensive devastation caused by introduced goats, hosted the most distinctive avifauna of any of those islands. Nevertheless, despite the island's 130-year history of ornithological exploration, its migratory birds remain little studied.

This update focuses on 56 specimens collected on the island between 1986 and 2004 (housed at the Colección Ornitológica del Laboratorio de Vertebrados de la Facultad de Ciencias, Universidad Autónoma de Baja California, Ensenada) and observations by Unitt and Alwin van der Heiden during a visit to the island 4–8 June 2000. Unitt's survey in 2000 focused on searching for the endemic subspecies of the Ruby-crowned Kinglet (*Regulus calendula obscurus*) in the island's cypress groves using taped recordings of the species' song. Other important bird specimens in the UABC collection were reported by Ruiz-Campos and Quintana-Barrios (1991), Ruiz-Campos and Rodríguez-Meraz (1993, 1997), Cota-Campbell and Ruiz-Campos (1995), Ruiz-Campos and Contreras-Balderas (1999), Ruiz-Campos et al. (2001, 2004), Erickson et al. (2002), and Ruiz-Campos (2004).

### SPECIES ACCOUNTS

In the following accounts, specimens are listed first by their catalog number, followed by age, sex, date, and location, as available. Except where

## UPDATE ON THE BIRDS OF ISLA GUADALUPE, BAJA CALIFORNIA

noted otherwise, all specimens were collected by Quintana-Barrios during four visits to Isla Guadalupe: 7 March–7 April 1986, 11 August–28 September 1986, 17 November–13 December 1986, and 25 April–24 May 1991. Most of the subspecific identifications are based on comparison of these specimens with the bird collection at the San Diego Natural History Museum (SDNHM).

Ring-necked Duck *Aythya collaris*. UABC 372, immature male, 22 November 1986, airstrip. First Guadalupe record of a species very rare on California's offshore islands (Sullivan and Kershner 2005).

Laysan Albatross *Phoebastria immutabilis*. UABC 1335, 1336, and 1337, skulls, 28 or 29 January 2003, William Henry. UABC 1338, 1339, and 1340, eggs, 28 or 29 January 2003, William Henry. UABC 1404, chick ~37 days old, 9 February 2003, Daniel Barton. To our knowledge, these are the only Guadalupe specimens. Jehl and Everett (1985) listed only three records from the vicinity of Guadalupe, but since 1986 the species has nested there in increasing numbers (Dunlap 1988, Gallo-Reynoso and Figueroa-Carranza 1996, Pitman et al. 2004). With 30 chicks and two adults on Isote Zapato in June 2000, and 22 chicks and one adult on Isote Negro at the same time (Pitman et al. 2004), there is now concern that nesting albatrosses on Guadalupe's offshore islets, never ravaged by goats, may jeopardize the endemic flora (J. P. Rebman pers. comm.).

Northern Fulmar *Fulmaris glacialis*. UABC 349, immature male, 30 November 1986, Punta Norte. This species is undoubtedly an irregular winter visitor to the waters around Isla Guadalupe, but Jehl and Everett (1985) and Howell and Webb (1992) reported the only other specific records: 6–7 December 1973 and 27 January 1988.

Leach's Storm-Petrel *Oceanodroma leucorhoa*. UABC 1332, adult, wing chord 137 mm, March 2003, Punta Sur, William Henry. UABC 1333, fresh juvenile, wing chord 143 mm, March 2003, Punta Sur, William Henry. Jehl and Everett (1985) summarized the confusing situation concerning the extinct Guadalupe Storm-Petrel (*O. macrodactyla*) and the winter and summer breeding populations of Leach's Storm-Petrels on Guadalupe. These specimens presumably represent the winter-breeding population.

Cattle Egret *Bubulcus ibis*. UABC 345, immature male, 22 November 1986, airstrip. The first island record. Howell and Webb (1992) subsequently saw seven between Tepeyac and the airstrip on 27 January 1988. This species colonized portions of California and the Baja California Peninsula between the 1960s and 1980s but has since become less frequent as a far-flung vagrant.

American Kestrel *Falco sparverius*. UABC 346, immature female, 18 August 1986, airstrip. UABC 383, immature male, 18 August 1986, airstrip. UABC 365, adult male, 2 December 1986, airstrip. The resident population appears to have been seen by all recent visitors to the island, although occasionally in low numbers, as by Oberbauer et al. (1989), Howell and Webb (1992), and Unitt in 2000. Unitt found this species to be scarce in the cypress groves in 2000, suggesting that the kestrels of Isla Guadalupe may nest primarily or exclusively in rock crevices, as is the case on San Clemente Island (Sullivan et al. 2003).

The supposed endemic subspecies *F. s. guadalupensis* Bond, 1943, is evidently not adequately differentiated from nominate *sparverius*. The describer noted that its size is equal to that of *sparverius* from British Columbia, even if larger than that of kestrels from the mainland nearest Isla Guadalupe. The degree of overlap in collar color evident from Bond's (1943) table 5 exceeds that allowing 75% of Guadalupe birds to be distinguished from mainland specimens. Friedmann et al. (1950) and Bird and Palmer (1988) also synonymized *guadalupensis* with *sparverius*.

## UPDATE ON THE BIRDS OF ISLA GUADALUPE, BAJA CALIFORNIA

Long-billed Curlew *Numenius americanus*. UABC 347, immature male, 28 September 1986, airstrip. Only Guadalupe record of this species rare on the islands off California.

Franklin's Gull *Larus pipixcan*. Mark J. Billings photographed Guadalupe's first recorded Franklin's Gull, an adult off the southeast end of the island, 14–17 November 2001. As of summer 2005, more than 30 other Franklin's Gulls had been reported from the Baja California Peninsula (Wilbur 1987, Erickson and Howell 2001, *N. Am. Birds*), including one at Islas Los Coronados 21 May 1967 (Jehl 1977).

Bonaparte's Gull *Larus philadelphia*. Lewis W. Walker collected Guadalupe's only known Bonaparte's Gull, an immature female, on 12 November 1938 (SDNHM 17969). Huey (1954) failed to report this specimen, even though he reported Walker's Common Yellowthroat (*Geothlypis trichas occidentalis*) collected the same day.

Xantus's Murrelet *Synthliboramphus hypoleucus*. UABC 604, second year, 19 March 1993, La Capilla, Javier Guillén. Jehl and Everett (1985) summarized the status of the breeding population of *S. h. hypoleucus* on Isla Guadalupe. Not previously reported is a specimen of subspecies *S. h. scrippsi*, which flew aboard a ship "south of Isla Guadalupe" at night on 11 February 1964 (SDNHM 35256).

Mourning Dove *Zenaida macroura*. UABC 358, adult, 22 September 1986, airstrip. UABC 1514, immature male, 20 January 2004, zone 2 north, Marlene Rodríguez. In June 2000 Unitt found one nest with eggs and another with chicks. The Mourning Dove established itself on Isla Guadalupe in the 1960s and is now a common breeding resident (Jehl and Everett 1985, Barton et al. 2004), although we are unaware of any other specimen records.

Burrowing Owl *Athene cucularia*. UABC 350, immature, 18 September 1986, airstrip, Palacios et al. (2000). In contrast to its plight on much of the mainland, on Isla Guadalupe the Burrowing Owl remains a fairly common resident, feeding in part on storm-petrels and murrelets (Barton et al. 2004).

Anna's Hummingbird *Calypte anna*. UABC 476, female, 24 May 1991, airstrip. In June 2000 Unitt saw up to seven per day in the cypress groves. The species is a widespread resident on Isla Guadalupe.

Northern Flicker *Colaptes auratus*. UABC 359, immature female, 4 December 1986, cypress grove. In June 2000 Unitt saw up to five per day in the cypress groves. Sweet et al. (2001) documented the extinction of the resident endemic Guadalupe Flicker (*C. a. rufipileus*) during the early 1900s and subsequent recolonization of the island by *C. a. collaris* from the mainland.

Say's Phoebe *Sayornis saya*. UABC 353, adult male, 13 December 1986, Punta Norte. The only other reports from the island are of eight seen November–December 1973 (Jehl and Everett 1985), one seen 22–25 January 1988 (Howell and Webb 1992), and another seen 28 February 2003 (Barton et al. 2004). All have been found on the north end of the island. The specimen is of the dark northern subspecies, *S. s. saya*, which has been recorded during migration and winter on Islas Los Coronados, Islas Todos Santos, Isla Cedros, and south to the tip of the Baja California Peninsula (Grinnell 1928).

Ash-throated Flycatcher *Myiarchus cinerascens*. UABC 388, immature, 3 September 1986, airstrip. Only island record of this fairly common western North American migrant.

Warbling Vireo *Vireo gilvus*. UABC 375, immature, 20 August 1986, airstrip. UABC 377, immature, 20 August 1986, airstrip. Only island records of this common western North American migrant. The specimens presumably represent the western *V. g. swainsonii*, but our examination was inconclusive.

## UPDATE ON THE BIRDS OF ISLA GUADALUPE, BAJA CALIFORNIA

Tree Swallow *Tachycineta bicolor*. UABC 374, immature (male?), 17 November 1986, Tepeyac. Only island record of this common western North American migrant.

Rock Wren *Salpinctes obsoletus*. UABC 0356, adult, 5 December 1986, airstrip. UABC 0478, first year, 29 April 1991, airstrip. UABC 0479, 29 April 1991, airstrip. The Guadalupe Rock Wren (*S. o. guadeloupenensis*) is one of the island's most common resident landbirds. The larger size and longer and heavier bill of the endemic subspecies, in comparison with nominate *obsoletus* of the mainland, are obvious in the field. The song of the island subspecies resembles that of the mainland form but is slightly lower pitched. The second element of the "sp-chee!" call is notably lower pitched and briefer, with fewer vibrations per second.

Gray-cheeked Thrush *Catharus minimus*. During Unitt's and van der Heiden's search of the cypress groves in June 2000, they encountered only a single migrant from the mainland, a Gray-cheeked Thrush in the south cypress grove on 6 June. The date approximates those of two spring vagrants in California, both on Southeast Farallon Island (California Bird Records Committee unpubl. data). There are no previous records from western Mexico of this species, which breeds in the boreal forests of Canada, Alaska, and northeastern Siberia and migrates to Amazonia (A.O.U. 1998). Unfortunately, van der Heiden was not able to approach it closely enough for identifiable photographs.

We found the thrush foraging on fallen cypress trees near the center of the densest remaining stand. Its size and posture were like those of other *Catharus* thrushes, and it usually held its tail elevated at about a 30° angle. Its upperparts were olive gray-brown, more olive than in any form of *Catharus* occurring regularly in southern or Baja California. The crown and back were uniform, the wings and tail appearing only very slightly browner. The indistinct eye ring was grayish white. The sides of the head faded gradually from the olive gray of the crown; that is, they lacked any tinge of buff. The unspotted throat was slightly buffy, the only area of buffy or rufous color on the bird. The whitish breast was softly spotted with olive gray. The spotting continued diffusely onto the flanks, which were lightly tinged gray (not buff). The belly and undertail coverts were white. Eye dark, legs dull pinkish (pale).

Northern Mockingbird *Mimus polyglottos*. UABC 348, immature, 30 November 1986, airstrip. Jehl and Everett (1985) listed only three records for the island, but most subsequent visitors have recorded one or two. Unitt noted a single individual singing territorially from a tree at the edge of the southern cypress grove on the mornings of 5 and 6 June 2000.

European Starling *Sturnus vulgaris*. UABC 389, immature, 11 August 1986, airstrip. UABC 351, immature male, 30 November 1986, airstrip. Starlings were first reported on Guadalupe in May 1971 (Jehl and Everett 1985), 130 were seen in January 1988 (Howell and Webb 1992), and the species was common and nesting by May/June 1996 (juvenile collected, Sweet et al. 2001). In 2000, however, Unitt observed only one adult in the north cypress grove on 5 June and four juveniles near the spring on 7 June.

Cedar Waxwing *Bombycilla cedrorum*. UABC 460, second-year female, 25 April 1991, airstrip. UABC 477, second-year female, 29 April 1991, airstrip. The only other island record of this widespread North American species is of one collected 28 January 1886 (Bryant 1887).

Yellow Warbler *Dendroica petechia*. UABC 360, immature female, 21 August 1986, airstrip. The only island record. The specimen is *D. p. morcomi*, the widespread breeder in most of the western United States and a common migrant in western North America.

## UPDATE ON THE BIRDS OF ISLA GUADALUPE, BAJA CALIFORNIA

Magnolia Warbler *Dendroica magnolia*. UABC 361, adult female, 20 August 1986, airstrip. This specimen, which represents the only island record of this vagrant, predates all other records for the Baja California Peninsula summarized by Erickson et al. (2001). Ruiz-Campos et al. (2001) reported the only other specimen from the peninsula, taken at Isla Cedros 19 September 1986.

Wilson's Warbler *Wilsonia pusilla*. UABC 472, second-year male, 8 May 1991, airstrip. UABC 473, adult male, 8 May 1991, airstrip. Jehl and Everett (1985) reported only two other island records of this common western North American migrant (18 May 1971, 18 April 1979), but Grinnell (1928) reported a specimen of *W. p. pileolata* "taken at sea, north of Guadalupe Island" on 25 April 1911. The more recent Guadalupe specimens also represent *pileolata*, which breeds from the Great Basin/Rocky Mountain region north to Alaska and which is a regular spring migrant and irregular fall migrant along the coast of southern California (e.g., Unitt 2004), though less numerous than the brighter yellow subspecies breeding along the Pacific coast, *W. p. chryseola*.

Chipping Sparrow *Spizella passerina*. UABC 357, immature, 21 August 1986, airstrip. The only other island records are of one on 6 January 1886 (specimen), several in November–December 1973 (both Jehl and Everett 1985), and one found dead on 1 February 2003 (Barton et al. 2004). Given nesting records from San Clemente Island (Sullivan and Kershner 2005), Islas Los Coronados (Jehl 1977), and on the adjacent mainland to south of Ensenada (*N. Am. Birds* 57:549), the species could colonize the island in the future. The specimen is *S. p. arizonae*, the subspecies widespread in western North America.

White-crowned Sparrow *Zonotrichia leucophrys*. UABC 355, immature male, 20 November 1986, airstrip. This abundant western North American migrant remains poorly represented on Guadalupe, with two seen on 14 April 1970 (Jehl and Everett 1985), eight from 22 to 25 January 1988 (Howell and Webb 1992), one on 23 November 1989 (Mellink and Palacios 1990), and seven during the period 28 January–8 April 2003 (Barton et al. 2004) being the only others reported. The specimen, and presumably most or all of the sight records, represent subspecies *Z. l. gambelii*.

Dark-eyed Junco *Junco hyemalis*. UABC 381, adult, 23 August 1986, cypress grove. UABC 373, adult, 8 September 1986, cypress grove. UABC 379, 380, and 1080, immatures, 8 December 1986, cypress grove. All specimens are of the endemic Guadalupe Junco (*J. h. insularis*). Until 1973 the A.O.U. (1973) considered this long-billed, sexually monomorphic junco to be specifically distinct, and it is still widely treated that way. Howell and Webb's (1995) population estimate of 50–100 individuals appears to be low. In 1996 Sweet et al. (2001) considered the species "common within the cypress grove." In June 2000, Unitt had daily counts as high as 90 (including many juveniles) and estimated the population to be on the order of 1000. Barton et al. (2004) estimated the population size to be >500. The species is listed as endangered by the Mexican government (SEMARNAT 2002) and as critical by Birdlife International (2000). Howell (1968) wrote the most thorough account of the species, but Nolan et al. (2002) stated that "only the most rudimentary facts are known" and "any detailed information about any aspect of its life history would be a contribution." Unitt observed the birds feeding heavily on both the seeds of exotic grasses and on insects, sometimes flycatching from the ground. The song and calls of the Guadalupe Junco differ fundamentally from those of juncos on the nearby mainland. The song is a variable but complex warbling recalling the song of a Sage (*Amphispiza belli*) or Lark (*Chondestes grammacus*) Sparrow, not a simple trill as heard from juncos in southern California. Mirsky (1976) published some sonograms. The call is a metallic note resembling the call of a California Towhee (*Pipilo crissalis*), not the toneless chip heard from juncos in southern California.

## UPDATE ON THE BIRDS OF ISLA GUADALUPE, BAJA CALIFORNIA

Western Meadowlark *Sturnella neglecta*. UABC 384, male, 26 September 1986, airstrip. First island specimen; the species was subsequently collected by Sweet et al. (2001). Jehl and Everett (1985) listed only one 1886 record, but meadowlarks apparently colonized in the late 1980s (Howell and Webb 1992, Barton et al. 2004). Subspecific identification of the specimen was not possible.

Yellow-headed Blackbird *Xanthocephalus xanthocephalus*. UABC 366, immature male, 12 September 1986, airstrip. Only island record of this species, which is generally rare as a migrant on the Baja California Peninsula.

Brown-headed Cowbird *Molothrus ater*. UABC 390, adult female *M. a. artemisiae*, 4 September 1986, airstrip. UABC 352, immature male *M. a. ater*, 18 November 1986, airstrip. UABC 385, female *M. a. obscurus*, 5 December 1986, airstrip. These specimens predate the island's only other published records: 13 seen on 27 January 1988 (Howell and Webb 1992) and 15 seen on 23 November 1989 (Mellink and Palacios 1990). Remarkably, the three specimens represent all three subspecies (Figure 1). The Dwarf Cowbird (*M. a. obscurus*) is the prevalent subspecies on the adjacent mainland. The larger Nevada Cowbird (*M. a. artemisiae*) is rare or uncommon on the Pacific slope of California and northern Baja California, with one collected on Islas Los Coronados 5 September 1914 (Unitt 2004) representing the only other published specimen record for the Baja California Peninsula north of the Cape District (Grinnell 1928, A.O.U. 1957). The Eastern Cowbird (*M. a. ater*) is a vagrant in the West, with only two specimen records for California (San Diego County 1 March 1978, Unitt 2004; Imperial County 15 January 1989, Patten et al. 2003) and no previous records for the Baja California Peninsula.

Orchard Oriole *Icterus spurius*. UABC 461, second-year female, 24 May 1991, airstrip. First island record of this vagrant from eastern North America. Wilbur (1987)



Figure 1. Three specimens of the Brown-headed Cowbird from Isla Guadalupe, representing three subspecies: *ater*, *obscurus*, and *artemisiae*. Note the more bulbous maxilla of the male (left), the key feature identifying it as the eastern subspecies, *Molothrus a. ater*.

Photo by Gorgonio Ruiz-Campos



## UPDATE ON THE BIRDS OF ISLA GUADALUPE, BAJA CALIFORNIA

and Wurster et al. (2001) summarized previous records for the Baja California Peninsula, including the only other specimen: a mummified carcass found at Isla San Benito Oeste in April 1963 (SDNHM 30629). Fourteen more individuals through winter 2005 were reported in the seasonal summaries published in *N. Am. Birds. Off California*, 51 had been recorded in fall and two in spring though 1999 at Southeast Farallon Island (Richardson et al. 2003), but only five have been found on the Channel Islands, all in fall (Sullivan and Kershner 2005).

House Finch *Carpodacus mexicanus*. UABC 364, male, 1 December 1986, airstrip. UABC 378, immature male, 1 December 1986, airstrip. UABC 382, adult female, 1 December 1986, airstrip. UABC 387, adult male, 1 December 1986, airstrip. All specimens are of the endemic Guadalupe House Finch (*C. m. amplus*), considered specifically distinct until 1973 (A.O.U. 1973). The species remains common (Barton et al. 2004). In 2000 Unitt estimated up to 200 on 7 June (including about 150 around the spring) and saw many recent fledglings still accompanying their parents. The larger size and larger, more parrotlike bill of *amplus*, in comparison to *frontalis* of the nearby mainland, are conspicuous in the field. The song of the Guadalupe subspecies resembles that of *frontalis* but lacks the ascending, burry “zweep!” at the end. It seems to be less varied in pitch than the song of *frontalis*, so that it sometimes sounds halfway between the song of a mainland House Finch and that of a California Purple Finch (*C. purpureus californicus*).

## DISCUSSION

The urgent tasks of conservation on Isla Guadalupe are finally underway with removal of goats from the island beginning in 2003 by the Grupo de Ecología y Conservación de Islas, the Mexican Secretary of Natural Resources, the Mexican Navy, and the island’s fishing cooperative (Aguirre Muñoz et al. 2004). By summer 2005 nearly all the goats had been removed and vigorous recovery of the island’s vegetation had begun (E. Ezcurra pers. comm.).

Howell and Cade (1954, 1956) listed 59 species of birds for Isla Guadalupe. Expanded coverage to include offshore waters to approximately 15 km, new records, and reanalysis of previous records led Jehl and Everett (1985) to recognize 112 species. Howell and Webb (1995, appendix C) considered three species hypothetical and updated the list to 117. Since then, Pyle et al. (1994), Unitt (in Howell et al. 2001), Sweet et al. (2001), Barton et al. (2004), and Erickson et al. (2005) added nine species (detailed in Appendix 1). From our own evaluation, we now recognize 139 species for the island and vicinity (Appendix 1), three of which were introduced into North America. Recognition of the Guadalupe Junco as a distinct species would add one, as Jehl and Everett (1985) and Barton et al. (2004) reported Oregon Juncos (*J. h. oregonus* subspecies group) as well. In addition to the endemic Guadalupe Storm-Petrel (*Oceanodroma macrodactyla*) and Guadalupe Caracara (*Caracara lutosa*), populations of eight other former breeders on the island are now considered extinct: Red-tailed Hawk (*Buteo jamaicensis*), White-throated Swift (*Aeronautes saxatalis*), Guadalupe Flicker (*Colaptes auratus rufipileus*), Red-breasted Nuthatch (*Sitta canadensis*), Guadalupe Bewick’s Wren (*Thryomanes bewickii brevicauda*), Guadalupe Ruby-crowned Kinglet (*Regulus calendula obscurus*), Guadalupe Spotted Towhee (*Pipilo maculatus consobrinus*), and Red Crossbill (*Loxia curvirostra*).

## UPDATE ON THE BIRDS OF ISLA GUADALUPE, BAJA CALIFORNIA

The Guadalupe Ruby-crowned Kinglet was last reported during the breeding season in June 1953, when Howell and Cade (1954) reported five singing males in the cypress grove. Most subsequent bird surveys on the island took place when migrants from the mainland are possible (October–April) or did not target the kinglet specifically. The negative result of our intensive search for the Ruby-crowned Kinglet in June 2000 confirms, to our satisfaction, the extinction of this well-marked subspecies (body plumage tinged dark brownish; crown patch pink, not red). Even if this subspecies' vocalizations differed considerably from those of mainland birds, we heard no songs or calls that could represent this species.

Islands are famous for the long lists of migratory bird species they are able to produce. Consider the 403 species recorded at tiny Southeast Farallon off San Francisco (Richardson et al. 2003). Two of the new species for Guadalupe we report are migrants as common as the Warbling Vireo and Yellow Warbler, showing that the pool of potential additions to the island's list has only begun to be tapped. Jehl and Everett's (1985) tables 1–3 show the seasonal distribution of ornithological investigations on the island 1875–1982. Only four visits were in September/October, the two most productive months for variety of migrant landbirds at this latitude. With enough time and coverage the Isla Guadalupe species list is likely to more than double in length.

### ACKNOWLEDGMENTS

We thank Manuel Mendoza, Jorge Alaníz, Humberto León-Castro, Jorge Villavicencio, Javier Guillén, Luciana Luna Mendoza, and William Henry for their valuable help in the field sampling. Also, our thanks go to the Cooperativa Abuloneros y Langosteros de la Isla Guadalupe and the Segunda Zona Naval de la Secretaría de Marina for providing logistics for field work and transportation. This study was funded by the Secretaría de Educación Pública (grant: Inventario y Evaluación de los Recursos Bióticos de Isla Guadalupe, B.C., México).

The expedition in June 2000 was funded by the National Science Foundation under grant 0074462. Thanks to Michael W. Hager and Exequiel Ezcurra of the San Diego Natural History Museum and William T. Everett of the Endangered Species Recovery Council for arranging and organizing it. We thank the appropriate Mexican authorities for granting permits and Patricia Beller for coordinating these. Thanks to the captain and crew of the *Shogun* for transportation to the island.

We thank Mark J. Billings for providing unpublished data and William T. Everett, Kimball L. Garrett, Robert A. Hamilton, Peter Pyle, and Amadeo M. Rea for helping with our examination of the specimens reported here. Pyle was especially helpful in determining the age and sex of many of the specimens. Robert L. Pitman assisted in our literature review. Robert A. Hamilton, Marshall J. Iliff, and Brian L. Sullivan provided helpful comments on the manuscript.

### LITERATURE CITED

- Aguirre Muñoz, A., García Gutiérrez, C., Luna Mendoza, L., Casillas Figueroa, F., Rodríguez Malagón, M., Hermosillo Bueno, M. A., Villalejo Murillo, A., Maytorena López, F. J., Silva Estudillo, N., and Samaniega Herrera, A. 2004. Restauración ambiental de la isla Guadalupe, México: Avances en la erradicación de cabras ferales. Reporte técnico. Grupo de Ecología y Conservación de Islas, Avenida López Mateos 1590-3, Fracc. Playa Ensenada, Ensenada, Baja California 22800.



## UPDATE ON THE BIRDS OF ISLA GUADALUPE, BAJA CALIFORNIA

- American Ornithologists' Union. 1957. Check-list of North American Birds, 5th ed. Am. Ornithol. Union, Baltimore.
- American Ornithologists' Union. 1973. Thirty-second supplement to the American Ornithologists' Union Check-list of North American Birds. *Auk* 90:411–419.
- American Ornithologists' Union. 1998. Check-list of North American Birds, 7th ed. Am. Ornithol. Union, Washington, D.C.
- Barton, D. C., Lindquist, K. E., Henry, R. W., and Luna Mendoza, L. M. 2004. Land-bird and waterbird notes from Isla Guadalupe, Mexico. *W. Birds* 35:186–196.
- Bird, D. M., and Palmer, R. S. 1988. American Kestrel, in *Handbook of North American Birds* (R. S. Palmer, ed.), vol. 5, pp. 253–290. Yale Univ. Press, New Haven, CT.
- Birdlife International. 2000. *Threatened Birds of the World*. Lynx Edicions, Barcelona.
- Bond, R. M. 1943. Variation in western Sparrow Hawks. *Condor* 45:168–185.
- Bryant, W. E. 1887. Additions to the ornithology of Guadalupe Island. *Bull. Calif. Acad. Sci.* 2:269–318.
- Cota-Campbell, F., and Ruiz-Campos, G. 1995. First record of the Gray Silky-flycatcher from Baja California, Mexico. *W. Birds* 26:197–199.
- Dunlap, E. 1988. Laysan Albatross nesting on Guadalupe Island, Mexico. *Am. Birds* 42:180–181.
- Erickson, R. A., Hamilton, R. A., González-Guzmán, S., and Ruiz-Campos, G. 2002. Primeros registros de anidación del Pato Friso (*Anas strepera*) en México. *Anal. Inst. Biol. Mex.* 73:67–71.
- Erickson R. A., Hamilton, R. A., and Howell, S. N. G. 2001. New information on migrant birds in northern and central portions of the Baja California Peninsula, including species new to Mexico. *Am. Birding Assoc. Monogr. Field Ornithol.* 3:112–170.
- Erickson R. A., and Howell, S. N. G., eds. 2001. *Birds of the Baja California Peninsula: Status, Distribution, and Taxonomy*. Am. Birding Assoc. Monogr. Field Ornithol. 3.
- Erickson, R. A., Iliff, M. J., Palacios, E., and Carmona, R. 2005. The fall migration: Baja California Peninsula region. *N. Am. Birds* 59:153–156.
- Friedmann, H., Griscom, L., and Moore, R. T. 1950. Distributional check-list of the birds of Mexico, part I. *Pac. Coast Avifauna* 29.
- Gallo-Reynoso, J.-P., and Figueroa-Carranza, A.-L. 1996. The breeding colony of Laysan Albatrosses on Isla de Guadalupe, Mexico. *W. Birds* 27:70–76.
- Grinnell, J. 1928. A distributional summation of the ornithology of Lower California. *Univ. Calif. Publ. Zool.* 32:1–300.
- Howell, S. N. G., Erickson, R. A., Hamilton, R. A., and Patten, M. A. 2001. An annotated checklist of the birds of Baja California and Baja California Sur. *Am. Birding Assoc. Monogr. Field Ornithol.* 3:171–203.
- Howell, S. N. G., and Webb, S. 1992. Observations of birds from Isla Guadalupe, México. *Euphonia* 1:1–6.
- Howell, S. N. G., and Webb, S. 1995. *A Guide to the Birds of Mexico and Northern Central America*. Oxford Univ. Press, Oxford, England.
- Howell, T. R. 1968. *Junco insularis* Ridgway, Guadalupe Junco, in *Life histories of North American cardinals, grosbeaks, buntings, towhees, finches, sparrows, and allies* (O. L. Austin, ed.), pp. 1094–1098. U. S. Nat. Mus. Bulletin 237.

## UPDATE ON THE BIRDS OF ISLA GUADALUPE, BAJA CALIFORNIA

- Howell, T. R., and Cade, T. J. 1954. The birds of Guadalupe Island in 1953. *Condor* 56:283–294.
- Howell, T. R., and Cade, T. J. 1956. Additional data on the birds of Guadalupe Island. *Condor* 58:78.
- Huey, L. M. 1954. Notes from southern California and Baja California, Mexico. *Condor* 56:51–52.
- Jehl, J. R., Jr. 1977. An annotated list of birds of Islas Los Coronados, Baja California, and adjacent waters. *W. Birds* 8:91–101.
- Jehl, J. R., Jr., and Everett, W. T. 1985. History and status of the avifauna of Isla Guadalupe, Mexico. *Trans. San Diego Soc. Nat. Hist.* 20:313–336.
- Mellink, E., and Palacios, E. 1990. Observations on Isla Guadalupe in November 1989. *W. Birds* 21:171–180.
- Mirsky, E. N. 1976. Song divergence in hummingbird and junco populations on Guadalupe Island. *Condor* 78:230–235.
- Nolan, V., Jr., Ketterson, E. D., Cristol, D. A., Rogers, C. M., Clotfelter, E. D., Titus, R. C., Schoech, S. J., and Snajdr, E. 2002. Dark-eyed Junco *Junco hyemalis*, in *The Birds of North America* (A. Poole and F. Gill, eds.), no. 716. *Birds N. Am.*, Philadelphia.
- Oberbauer, T. A., Cibit, C., and Lichtwardt, E. 1989. Notes from Isla Guadalupe. *W. Birds* 20:89–90.
- Palacios, E., Anderson, D. W., Mellink, E., and González-Guzman, S. 2000. Distribution and abundance of Burrowing Owls on the peninsula and islands of Baja California. *W. Birds* 31:89–99.
- Patten, M. A., McCaskie, G., and Unitt, P. 2003. *Birds of the Salton Sea: Status, Biogeography, and Ecology*. Univ. Calif. Press, Berkeley.
- Pitman, R. L., and Ballance, L. T. 2002. The changing status of marine birds breeding at San Benedicto Island, Mexico. *Wilson Bull.* 114:11–19.
- Pitman, R. L., Walker, W. A., Everett, W. T., and Gallo-Reynoso, J.-P. 2004. Population status, foods and foraging of Laysan Albatrosses *Phoebastria immutabilis* nesting on Guadalupe Island, Mexico. *Marine Ornithology* 32:159–165.
- Pyle, P., Hanni, K., and Smith, D. 1994. Bird notes from Isla Guadalupe, including three new island records. *Euphonia* 3:1–4.
- Richardson, T. W., Pyle, P., Burnett, R., and Capitolo, P. 2003. The occurrence and seasonal distribution of migratory birds on Southeast Farallon Island, 1968–1999. *W. Birds* 34:58–96.
- Ruiz-Campos, G. 2004. First specimen of the Neotropic Cormorant from the Baja California Peninsula, Mexico. *W. Birds* 35:93–96.
- Ruiz-Campos, G., and Contreras-Balderas, A. J. 1999. Second mainland specimen of the Red-breasted Nuthatch from Baja California, Mexico. *W. Birds* 30:53–54.
- Ruiz-Campos, G., Contreras-Balderas, A. J., Rodríguez-Meraz, M., and Valles-Ríos, M. E. 2004. Catálogo de especimens recientes de aves de las sierras Juárez y San Pedro Mártir, e inmediaciones, noroeste de Baja California, México. *Cotinga* 21:45–58.
- Ruiz-Campos, G., González-Guzman, S., Erickson, R. A., and Hamilton, R. A. 2001. Notable bird specimen records from the Baja California Peninsula. *Am. Birding Assoc. Monogr. Field Ornithol.* 3:238–241.
- Ruiz-Campos, G., and Quintana-Barrios, L. 1991. First mainland record of Red-breasted Nuthatch from Baja California, Mexico. *W. Birds* 22:189–190.

## UPDATE ON THE BIRDS OF ISLA GUADALUPE, BAJA CALIFORNIA

- Ruiz-Campos, G., and Rodríguez-Meraz, M. 1993. Notas ecológicas sobre la avifauna de Laguna El Rosario, Baja California, México. *Southwest. Nat.* 38:59–64.
- Ruiz-Campos, G., and Rodríguez-Meraz, M. 1997. Composición taxonómica y ecológica de la avifauna del los ríos El Mayor y Hardy, y áreas adyacentes, en el Valle de Mexicali, Baja California, México. *Anal. Inst. Biol. Mex.* 68:291–315.
- SEMARNAT (Secretaría de Medio Ambiente y Recursos Naturales). 2002. Norma Oficial Mexicana NOM-059-ECOL-2001, Protección ambiental—Especies nativas de México de flora y fauna silvestres—Categorías de riesgo y especificaciones para su inclusión, exclusión o cambio—Lista de especies en riesgo. *Diario Oficial de la Federación*, 6 marzo 2002, segunda sección.
- Small, A. 1961. The spring migration: Southern Pacific coast region. *Audubon Field Notes* 15:436–440.
- Sullivan, B. L., and Kershner, E. L. 2005. The birds of San Clemente Island. *W. Birds* 36:158–220.
- Sullivan, B. L., Kershner, E. L., Finn, S. P., Condon, A. M., Cooper, D. M., and Garcelon, D. K. 2003. Nest-site characteristics and linear abundance of cliff-nesting American Kestrels on San Clemente Island, California. *J. Raptor Res.* 37:323–329.
- Sweet, P. R., Barrowclough, G. F., Klicka, J. T., Montañez-Godoy, L., and Escalante-Pliego, P. 2001. Recolonization of the flicker and other notes from Isla Guadalupe, Mexico. *W. Birds* 32:71–80.
- Unitt, P. 2004. San Diego County bird atlas. *Proc. San Diego Soc. Nat. Hist.* 39.
- Wilbur, S. R. 1987. *Birds of Baja California*. Univ. Calif. Press, Berkeley.
- Wurster, T. E., Erickson, R. A., Hamilton, R. A., and Howell, S. N. G. 2001. Database of selected observations: An augment to New information on migrant birds in northern and central portions of the Baja California Peninsula. *Am. Birding Assoc. Monogr. Field Ornithol.* 3:204–237.

Appendix 1. Birds recorded from Isla Guadalupe and vicinity. Each species is followed by numbers corresponding to publications (listed below) concerning that species' status on the island. Virtually all publications prior to 1954 were summarized by Howell and Cade (1954) in the first full listing of the island's avifauna, and we use that publication as our starting point. Jehl and Everett (1985) wrote a detailed account of all species, and Howell and Webb (1995) produced the only subsequent complete list. Species for which a collected specimen has been reported are designated with an asterisk. Specimens collected by W. E. Bryant in 1885, however, were destroyed in the San Francisco earthquake and fire of 1906 and are designated with a dagger. Subspecies are listed only when confirmed with specimens.

1. Howell and Cade 1954; 2. Howell and Cade 1956; 3. Small 1961; 4. Howell 1968; 5. Jehl and Everett 1985; 6. Dunlap 1988; 7. Oberbauer et al. 1989; 8. Mel-link and Palacios 1990; 9. Howell and Webb 1992; 10. Pyle et al. 1994; 11. Howell and Webb 1995; 12. Gallo-Reynoso and Figueroa-Carranza 1996; 13. Palacios et al. 2000; 14. Howell et al. 2001; 15. Sweet et al. 2001; 16. Pitman and Ballance 2002; 17. Barton et al. 2004; 18. Erickson et al. 2005; 19. Pitman et al. 2004; 20, this report.

UPDATE ON THE BIRDS OF ISLA GUADALUPE, BAJA CALIFORNIA

Greater White-fronted Goose <i>Anser albifrons</i>	1, 5, 17
Brant <i>Branta bernicla</i>	5
*Mallard <i>Anas platyrhynchos</i>	5
*Blue-winged Teal <i>Anas discors</i>	5
Cinnamon Teal <i>Anas cyanoptera</i>	5
Northern Shoveler <i>Anas clypeata</i>	9
Northern Pintail <i>Anas acuta</i>	5
*Ring-necked Duck <i>Aythya collaris</i>	20
Lesser Scaup <i>Aythya affinis</i>	5, 11
Red-breasted Merganser <i>Mergus serrator</i>	5
*Pacific Loon <i>Gavia pacifica</i>	1, 5
*Pied-billed Grebe <i>Podilymbus podiceps</i>	5
*Eared Grebe <i>Podiceps nigricollis</i>	2, 5
Western Grebe <i>Aechmophorus occidentalis</i>	5, 11
*Laysan Albatross <i>Phoebastria immutabilis</i> : <b>breeds</b>	3, 5, 6, 7, 8, 9, 10, 12, 15, 19, 20
*Black-footed Albatross <i>Phoebastria nigripes</i> : <b>breeds</b>	3, 5, 16
Short-tailed Albatross <i>Phoebastria albatrus</i>	5
*Northern Fulmar <i>Fulmarus glacialis</i>	5, 9, 20
Cook's Petrel <i>Pterodroma cookii</i>	3, 5
*Sooty Shearwater <i>Puffinus griseus</i>	5
*Black-vented Shearwater <i>Puffinus opisthomelas</i> : <b>breeds</b>	1, 5
*Leach's Storm-Petrel <i>Oceanodroma leucorhoa socorroensis</i> : <b>breeds</b>	1, 5, 8, 20
*Wedge-rumped Storm-Petrel <i>Oceanodroma tethys</i>	1, 5
*Guadalupe Storm-Petrel <i>Oceanodroma macrodactyla</i> : <b>extinct</b>	1, 5
Red-billed Tropicbird <i>Phaethon aethereus</i>	5
*Red-tailed Tropicbird <i>Phaethon rubricauda</i>	1, 5
Masked Booby <i>Sula dactylatra</i>	10
Brown Pelican <i>Pelecanus occidentalis</i>	1, 5
*Brandt's Cormorant <i>Phalacrocorax penicillatus</i> : <b>breeds</b>	1, 5, 15
Pelagic Cormorant <i>Phalacrocorax pelagicus</i>	5, 10, 11
Magnificent Frigatebird <i>Fregata magnificens</i>	5
Great Blue Heron <i>Ardea herodias</i>	1, 5, 17
*Cattle Egret <i>Bubulcus ibis</i>	9, 20
*Osprey <i>Pandion haliaetus carolinensis</i> : <b>bred formerly?</b>	1, 5
*Red-tailed Hawk <i>Buteo jamaicensis calurus</i> : <b>extirpated</b>	1, 5
*Guadalupe Caracara <i>Caracara lutosa</i> : <b>extinct</b>	1, 5
*American Kestrel <i>Falco sparverius sparverius</i> : <b>breeds</b>	1, 5, 7, 8, 9, 15, 17, 20
Peregrine Falcon <i>Falco peregrinus</i>	5, 17
Pacific Golden-Plover <i>Pluvialis fulva</i>	5, 9, 17
Killdeer <i>Charadrius vociferus</i>	5, 8
Willet <i>Catoptrophorus semipalmatus</i>	5
*Wandering Tattler <i>Heterosceles incanus</i>	1, 5, 17
Spotted Sandpiper <i>Actitis macularius</i>	17
*Long-billed Curlew <i>Numenius americanus</i>	20
*Ruddy Turnstone <i>Arenaria interpres</i>	5, 17
*Black Turnstone <i>Arenaria melanocephala</i>	1, 5, 17
Sanderling <i>Calidris alba</i>	5
Western Sandpiper <i>Calidris mauri</i>	5
*Short-billed Dowitcher <i>Limnodromus griseus</i>	5
Wilson's Snipe <i>Gallinago delicata</i>	1
*Red Phalarope <i>Phalaropus fulicarius</i>	3, 5
Pomarine Jaeger <i>Stercorarius pomarinus</i>	5
Parasitic Jaeger <i>Stercorarius parasiticus</i>	11
Long-tailed Jaeger <i>Stercorarius longicaudus</i>	5

UPDATE ON THE BIRDS OF ISLA GUADALUPE, BAJA CALIFORNIA

Laughing Gull <i>Larus atricilla</i>	9, 10
Franklin's Gull <i>Larus pipixcan</i>	20
*Bonaparte's Gull <i>Larus philadelphia</i>	20
Heermann's Gull <i>Larus heermanni</i>	5, 9
Ring-billed Gull <i>Larus delawarensis</i>	5, 8, 9, 17
*California Gull <i>Larus californicus californicus</i>	5, 9, 17
*Herring Gull <i>Larus argentatus smithsonianus</i>	1, 5, 17
Thayer's Gull <i>Larus thayeri</i>	5
*Western Gull <i>Larus occidentalis wymani</i> : <b>breeds</b>	1, 5, 8, 15, 17
Glaucous-winged Gull <i>Larus glaucescens</i>	1, 5, 17
Black-legged Kittiwake <i>Rissa tridactyla</i>	5
Sabine's Gull <i>Xema sabini</i>	5
Royal Tern <i>Sterna maxima</i>	5, 11
Arctic Tern <i>Sterna paradisaea</i>	5
Xantus's Murrelet <i>Synthliboramphus hypoleucus</i>	
*S. h. hypoleucus: <b>breeds</b>	1, 5, 7, 20
*S. h. scrippsi	20
*Cassin's Auklet <i>Ptychoramphus aleuticus</i> : <b>breeds</b>	1, 5
*Rhinoceros Auklet <i>Cerorhinca monocerata</i>	1, 5
Rock (Feral) Pigeon <i>Columba livia</i> : <b>possibly breeds</b>	5, 9, 17
*White-winged Dove <i>Zenaida asiatica</i>	1, 8
*Mourning Dove <i>Zenaida macroura</i> : <b>breeds</b>	1, 5, 7, 8, 9, 15, 17, 20
*Barn Owl <i>Tyto alba</i>	15
*Burrowing Owl <i>Athene cunicularia</i> : <b>breeds</b>	1, 5, 7, 9, 13, 15, 17, 20
Vaux's Swift <i>Chaetura vauxi</i>	5, 11
*White-throated Swift <i>Aeronautes saxatalis</i> : <b>extirpated</b>	1
*Anna's Hummingbird <i>Calypte anna</i> : <b>breeds</b>	1, 5, 7, 9, 15, 17, 20
Belted Kingfisher <i>Ceryle alcyon</i>	5, 17
Northern Flicker <i>Colaptes auratus</i>	
*C. a. collaris: <b>breeds</b>	5, 7, 9, 15, 17, 20
*C. a. rufipileus: <b>extinct</b>	1, 5
*Least Flycatcher <i>Empidonax minimus</i>	5
*Say's Phoebe <i>Sayornis saya saya</i>	5, 9, 17, 20
*Ash-throated Flycatcher <i>Myiarchus cinerascens</i>	20
†Loggerhead Shrike <i>Lanius ludovicianus</i>	1, 5
*Warbling Vireo <i>Vireo gilvus</i>	20
Clark's Nutcracker <i>Nucifraga columbiana</i>	5
*Tree Swallow <i>Tachycineta bicolor</i>	20
Northern Rough-winged Swallow <i>Stelgidopteryx serripennis</i>	5
Barn Swallow <i>Hirundo rustica</i>	5
*Red-breasted Nuthatch <i>Sitta canadensis</i> : <b>extirpated</b>	1, 5
*Rock Wren <i>Salpinctes obsoletus</i>	
<i>guadaloupensis</i> : <b>breeds</b>	1, 5, 7, 8, 9, 15, 17, 20
*Bewick's Wren <i>Thryomanes bewickii brevicauda</i> : <b>extinct</b>	1, 5
Ruby-crowned Kinglet <i>Regulus calendula</i>	
(* <i>R. c. obscurus</i> : <b>extinct</b> )	1, 5, 9, 17, 20
†Mountain Bluebird <i>Sialia currucoides</i>	1, 5, 17
Townsend's Solitaire <i>Myadestes townsendi</i>	5
Gray-cheeked Thrush <i>Catharus minimus</i>	14, 20
*Swainson's Thrush <i>Catharus ustulatus ustulatus</i>	15
†Hermit Thrush <i>Catharus guttatus</i>	1, 5, 9
†American Robin <i>Turdus migratorius</i>	1, 5, 17
†Varied Thrush <i>Ixoreus naevius</i>	1, 5, 8
Gray Catbird <i>Dumetella carolinensis</i>	18
*Northern Mockingbird <i>Mimus polyglottos</i> : <b>possibly breeds</b>	1, 5, 8, 9, 15, 17, 20

UPDATE ON THE BIRDS OF ISLA GUADALUPE, BAJA CALIFORNIA

†Sage Thrasher <i>Oreoscoptes montanus</i>	1, 5, 17
*European Starling <i>Sturnus vulgaris</i> : <b>breeds</b>	5, 7, 8, 9, 15, 17, 20
†American Pipit <i>Anthus rubescens</i>	1, 5
*Cedar Waxwing <i>Bombycilla cedrorum</i>	1, 5, 20
Phainopepla <i>Phainopepla nitens</i>	8
*Yellow Warbler <i>Dendroica petechia morcomi</i>	20
*Magnolia Warbler <i>Dendroica magnolia</i>	20
Yellow-rumped Warbler <i>Dendroica coronata</i>	
†Audubon's Warbler <i>D. c. auduboni</i> group of subspecies	1, 5, 9, 17
Myrtle Warbler <i>D. c. coronata</i> group of subspecies	5, 17
Townsend's Warbler <i>Dendroica townsendi</i>	5
Palm Warbler <i>Dendroica palmarum</i>	17
Black-and-white Warbler <i>Mniotilta varia</i>	5
*Ovenbird <i>Seiurus aurocapilla aurocapilla</i>	1, 5
*Common Yellowthroat <i>Geothlypis trichas occidentalis</i>	1, 5
*Wilson's Warbler <i>Wilsonia pusilla pileolata</i>	5, 20
*Summer Tanager <i>Piranga rubra rubra</i>	1, 5
*Spotted Towhee <i>Pipilo maculatus consobrinus</i> : <b>extinct</b>	1, 5
*Chipping Sparrow <i>Spizella passerina arizonae</i>	1, 5, 17, 20
Vesper Sparrow <i>Pooecetes gramineus</i>	9
†Fox Sparrow <i>Passerella iliaca unalaschcensis</i> group of subspecies	1, 5
*Lincoln's Sparrow <i>Melospiza lincolni lincolni</i>	1, 5
*White-throated Sparrow <i>Zonotrichia albicollis</i>	1, 5
*White-crowned Sparrow <i>Zonotrichia leucophrys gambelii</i>	5, 8, 9, 17, 20
†Golden-crowned Sparrow <i>Zonotrichia atricapilla</i>	1, 5
Dark-eyed Junco <i>Junco hyemalis</i>	
*Guadalupe Junco <i>J. h. insularis</i> : <b>breeds</b>	1, 4, 5, 7, 8, 9, 15, 17, 20
†Oregon Junco <i>J. h. oregonus</i> group of subspecies	5, 17
*Rose-breasted Grosbeak <i>Pheucticus ludovicianus</i>	5
*Black-headed Grosbeak <i>Pheucticus melanocephalus</i>	5
*Western Meadowlark <i>Sturnella neglecta</i> : <b>breeds</b>	1, 5, 8, 9, 10, 15, 17, 20
*Yellow-headed Blackbird <i>Xanthocephalus xanthocephalus</i>	20
Brewer's Blackbird <i>Euphagus cyanocephalus</i>	5, 9
Brown-headed Cowbird <i>Molothrus ater</i>	8, 9
*M. a. obscurus	20
*M. a. artemisiae	20
*M. a. ater	20
*Orchard Oriole <i>Icterus spurius</i>	20
*Hooded Oriole <i>Icterus cucullatus</i>	10, 15
Scott's Oriole <i>Icterus parisorum</i>	5, 11
*House Finch <i>Carpodacus mexicanus amplus</i> : <b>breeds</b>	1, 5, 7, 8, 9, 10, 15, 17, 20
*Red Crossbill <i>Loxia curvirostra bendirei</i> : <b>extirpated</b>	1, 5
House Sparrow <i>Passer domesticus</i> : <b>possibly breeds</b>	9, 10, 17
Unconfirmed species:	
Pink-footed Shearwater <i>Puffinus creatopus</i>	5, 11
Ashy Storm-Petrel <i>Oceanodroma homochroa</i>	1, 5
Black Storm-Petrel <i>Oceanodroma melania</i>	5, 11
Double-crested Cormorant <i>Phalacrocorax auritus</i>	1, 5, 11
Prairie Falcon <i>Falco mexicanus</i>	1, 5
Great Horned Owl <i>Bubo virginianus</i>	5, 11

Accepted 6 November 2005